



Motorola CP1660

Commercial Portable Two-Way Radio



Full keypad provides easy accessibility to change channels or place a selective call (DTMF signaling).

Built-in simple voice scrambling for **increased privacy**.

Built-in DTMF signaling provides **caller identification** and **private communication**.

VOX ready for **hands-free communication**—keeps users hands free for the job at hand.

Tighter specifications provide **enhanced rejection of interference** so you can get your message through clearly.

X-Pand technology provides **crisp, clear and strong audio quality**.

Multi-channel capability—99 channels to support communication amongst all your employees.

User programmable feature allows customization of radio profiles while on the go.

Standard Lilon battery provides **up to 11 hours (5/5/90 duty cycle) of battery life at high power** to meet the demands of your employee's work shift. A high-capacity Lilon battery option is available for those with longer shift requirements or increased communication needs.

High power—5 watt (VHF) / 4 watt (UHF)—adjustable power levels help extend battery life.

5 programmable buttons—enabling easy, **one-touch access to up to 10 user-selected features**.

Talkaround capability enabling communication even when a repeater is not being used.

Rapid-rate drop-in charging—charge standard capacity batteries in less than 3 hours with the included drop-in charger.

Easy-to-handle, lightweight, compact design.

A wide range of Motorola Original® audio, energy and carrying accessories, as well as **Mag One™ audio accessories**, provide an affordable option for light duty radio users.

Recommended Accessories#

PMMN4013—Remote Speaker Microphone with 3.5mm audio jack, IP54

PMLN5003—Lightweight Temple Transducer with In-line Microphone and PTT

PMLN5001—D-Style Earpiece with In-line Microphone and PTT

PMLN4442—Earbud with In-line Microphone and PTT/VOX switch (Mag One)

HMN9754—2-Wire Surveillance Kit, Beige

#For a complete listing of accessories, please refer to the accessories brochure AF4-06-015

Enhanced functionality, ease of use, reliable communication

Easy and prompt communication with your workforce is vital to improving response time, strengthening employee efficiency and increasing customer satisfaction. Motorola's two-way radios provide a durable, high-quality voice communication solution that helps your business increase productivity and provide excellent customer service.

Ideal for light manufacturing, retail, hospitality services, property and real estate management. The Motorola CP1660 Commercial Portable radio brings you quality features you need at a competitive price. With its full keypad for increased ease of use, extensive feature set, and ergonomic shape for comfortable handling in a durable, lightweight, compact design, you can enhance communication while increasing efficiency and productivity.

CP1660 Radio Specifications*

General Specifications

| | CP1660 | |
|--|---|--|
| | VHF | UHF |
| Frequency Range* | 136-174MHz | 350-390MHz 403-438MHz 403-446MHz 435-480MHz |
| Memory Channels | 99 CH | |
| Channel Spacing | 12.5/25 kHz switchable | |
| Operating Temperature Range | -30°C to +60°C (Radio) | |
| Dimensions (H X W X D) with Lilon battery NiMH battery High Capacity Lilon battery | 120 x 55 x 35.5 mm 120 x 55 x 36.5 mm 120 x 55 x 40.7 mm | |
| Weight with Lilon battery NiMH battery High Capacity Lilon battery | 335.0 gm 394.5 gm 342.0 gm | |
| Average Battery Life @5-5-90% Duty Cycle, with Lilon battery NiMH battery High Capacity Lilon battery | High Power up to 11 hrs up to 9 hrs up to 16 hrs | |
| Sealing | Passes rain testing per IP54 | |
| Shock & Vibration | Diecast with impact resistance polycarbonate housing, Meets MIL-STD810C/D/E/F | |
| Dust & Humidity | Weather resistant housing Meets MIL-STD810C/D/E/F | |

Transmitter

| | CP1660 | | | |
|--|---|-----------------|------------------|-----------------|
| | VHF | | UHF | |
| RF Output | High Power 5W | Low Power 1W | High Power 4W | Low Power 1W |
| Spurs and Harmonics | 9kHz - 1GHz < -36dBm > 1GHz < -30dBm | | | |
| Frequency Stability (-30°C to +60°C) | ±/± 2.5ppm | | | |
| FM Hum & Noise | > 40dB | | | |
| Modulation Limiting | ≤ 5kHz (25kHz) ≤ 2.5kHz (12.5kHz) | | | |
| Audio Response (from 6dB/oct pre-emphasis, 300-3000Hz) | ≤ ±1/-3dB | | | |
| Audio Distortion @ 1kHz tone, 60% rated max dev. | <5% | | | |

Receiver

| | CP1660 | |
|-------------------------------|--|-----|
| | VHF | UHF |
| Sensitivity (12dB SINAD) | < -119 dBm (0.25uV) | |
| Adjacent Channel Selectivity | > 70dB (25kHz), >65dB (12.5kHz) | |
| Intermodulation | >70dB | |
| Spurious Rejection | >70dB | |
| Audio Distortion | <5% | |
| Hum and Noise | >40dB | |
| Conducted Emission | < -57dBm for below 1GHz < -47dBm for above 1GHz | |
| Audio Output @ <5% Distortion | 500mW (at 24 ohm) | |

Military Standards

| Applicable MIL-STD | 810C | | 810D | | 810E | | 810F | |
|--------------------|--------|--------------------|--------|-------------|--------|-------------|--------|---------------|
| | Method | Proc./Cat. | Method | Proc./Cat. | Method | Proc./Cat. | Method | Proc./Cat. |
| Low Pressure | 500.1 | I | 500.2 | II | 500.3 | II | 500.4 | II |
| High Temperature | 501.1 | I, II | 501.2 | I/A1, II/A1 | 501.3 | I/A1, II/A1 | 501.4 | I/Hot, II/Hot |
| Low Temperature | 502.1 | I | 502.2 | I/C3, II/C1 | 502.3 | I/C3, II/C1 | 502.4 | I/C3, II/C1 |
| Temperature Shock | 503.1 | - | 503.2 | I/A1C3 | 503.3 | I/A1C3 | 503.4 | I |
| Solar Radiation | 505.1 | II | 505.2 | I | 505.3 | I | 505.4 | I |
| Rain | 506.1 | I, II | 506.2 | I, II | 506.3 | I, II | 506.4 | I, II |
| Humidity | 507.1 | II | 507.2 | II | 507.3 | II | 507.4 | - |
| Salt Fog | 509.1 | - | 509.2 | - | 509.3 | - | 509.4 | - |
| Blowing Dust | 510.1 | I | 510.2 | I | 510.3 | I | 510.4 | I |
| Vibration | 514.2 | VIII/F, Curve-W | 514.3 | I/10, II/3 | 514.4 | I/10, II/3 | 514.5 | I/24 |
| Shock | 516.2 | I, II, V | 516.3 | I, IV, VI | 516.4 | I, IV, VI | 516.5 | I, IV, VI |

*Availability subject to country's laws and regulations. Radios meet applicable regulatory requirements.

All specifications subject to change without notice.

Specifications are not representative of all radios and may vary in different radios.

*Radio frequencies subject to availability.



Stringent Motorola Accelerated Life Testing simulating five years of hard use in real life. EA RS-2169 in Shock, Vibration, Dust, Humidity, IP54 for Sealing.



Compliance with ISO 9001 Standard on international quality system assurance on design, development, production, installation and servicing of a product.



Stamp of Approval from the U.S. Military for use in rough environments.



To ensure compliance with RF energy exposure standards and regulations, use only Motorola-approved batteries and accessories. Use of non-Motorola-approved batteries and accessories may result in RF energy exposure standards being exceeded.



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